

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (currently amended): An electrode material for lithium ion batteries,
~~characterized in that the electrode material comprises~~ comprising

- 5-85% by weight of nanoscale silicon aggregate particles which have a BET surface area of from 5 to 700 m²/g and a mean primary particle diameter of from 5 to 200 nm,
 - 0-10% by weight of conductive carbon black,
 - 5-80% by weight of graphite having a mean particle diameter of from 1 µm to 100 µm and
 - 5-25% by weight of a binder,
- the proportions of the components summing to not more than 100% by weight.

Claim 2 (currently amended): ~~An~~ The electrode material according to claim 1,
~~characterized in that the~~ wherein said electrode material comprises

- 65-86.5% by weight of nanoscale silicon aggregate particles,
- 0.5-5% by weight of conductive carbon black,
- 8-20% by weight of graphite having a mean particle diameter of from 2 µm to 50 µm and
- 5-10% by weight of a binder.

Claim 3 (currently amended): ~~An~~ The electrode material according to claim 1,
~~characterized in that the~~ wherein said electrode material comprises

- 5-40% by weight of nanoscale silicon aggregate particles,

- 55-85% by weight of graphite having a mean particle diameter of from 2 μm to 50 μm and
- 5-10% by weight of a binder.

Claim 4 (Currently Amended): ~~An~~ The electrode material according to claim 1, ~~characterized in that the~~ wherein said nanoscale silicon aggregate particles are doped.

Claim 5 (currently amended): ~~An~~ The electrode material according to claim 4, ~~characterized in that the~~ wherein said nanoscale silicon aggregate particles comprise not more than 53% by weight of lithium as a doping component.

Claim 6 (Currently Amended): ~~An~~ The electrode material according to claim 1, ~~characterized in that the~~ wherein said nanoscale silicon aggregate particles have a BET surface area of from 6 to 140 m^2/g .

Claim 7 (currently amended): ~~The~~ A method of preparing a lithium ion battery comprising assembling with using an electrode material according to claim 1 ~~for the production of lithium ion batteries.~~

Claim 8 (Currently Amended): The method ~~of using~~ according to claim 7, ~~characterized in that~~ wherein said lithium ion battery comprises an electrolyte composition which comprises from 0.5 to 10% by weight of vinylene carbonate ~~is used as the electrolyte.~~

Claim 9 (Currently Amended): The method ~~of using~~ according to claim 7, ~~characterized in that~~ wherein said lithium ion battery comprises an electrolyte composition

comprising at least one organic solvent and at least one alkali metal salt or alkaline earth metal salt ~~is used as the electrolyte.~~

Claim 10 (Currently Amended): The method ~~of using~~ according to claim 9, ~~characterized in that~~ wherein said an electrolyte composition which comprises an organic solvent is at least one organic solvent selected from the group consisting of ethylene carbonate, dimethyl carbonate, ethyl methyl carbonate, diethyl carbonate, propylene carbonate, butylene carbonate, methyl propyl carbonate, butyl methyl carbonate and its isomers, 1,2 dimethoxyethane, tetrahydrofuran, 2 methyltetrahydrofuran, diethylene glycol dialkyl ester, dioxolane, propylene oxide, dimethyl sulfoxide, dimethylformamide, formamide, nitromethane, gamma-butyrolactone, alkyl esters of carboxylic acids and/or methyl lactate ~~is used as the electrolyte.~~

Claim 11 (Currently Amended): The method of using according to claim 9, ~~characterized in that an~~ wherein said electrolyte composition ~~which comprises a~~ at least one ~~conductive~~ alkali metal salt selected from the group consisting of LiPF₆, LiClO₄, LiAsF₆, LiBF₄, LiCF₃SO₃, LiN(CF₃SO₂)₂, LiN(SO₂CF₂CF₃)₂, LiSbF₆, LiAlCl₄, LiGaCl₄, LiCl, LiNO₃, LiSCN, LiO₃SCF₂CF₃, LiC₆F₅SO₃, LiO₂CCF₃, LiFSO₃, LiB(C₆H₅)₄, LiB(C₂O₄)₂, and/or lithium fluoroalkylphosphates ~~is used as the electrolyte.~~

Claim 12 (Currently Amended): The method of using according to claim 7, ~~characterized in that~~ wherein said lithium ion battery comprises an electrolyte composition in which the concentration of ~~the~~ a conductive salt is from 0.5 mol/l to the solubility limit of the corresponding salt ~~is used as the electrolyte.~~

Claim 13 (previously presented): A lithium ion battery having a negative electrode which comprises an electrode material according to claim 1.

Claim 14 (new) The electrode material according to claim 1, wherein a conductive carbon black is present in an amount of 0.5 to 4% by weight.

Claim 15 (new) The electrode material according to claim 1, wherein a conductive carbon black is present and has a mean particle size of from 20-60 nm.

Claim 16 (new) The electrode material according to claim 1, wherein a conductive carbon black is present and has a BET surface area of from 50 to 80 m²/g.

Claim 17 (new) The electrode material according to claim 1, wherein said graphite has a d₉₀ value of from 5 to 10 μm.

Claim 18 (new) The electrode material according to claim 1, wherein said graphite has a BET surface area of from 5 to 30 m²/g.